Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-12 (canceled):

Claim 13 (currently amended): A polymer mixture consisting of:

at least one synthetic first polymer P(i) and between 3% to 14% by weight of at least one second polymer P(j),

wherein the first polymer P(i) has a degree of polymerisation DP(P(i)) > 500 and at least one type of crystallisable sequences A having a degree of polymerisation DPs(P(i)) of these sequences > 20,

wherein the second polymer P(j) is made up of the same monomer units as the sequences A of P(i) and the degree of polymerisation DP(P(j)) of P(j) is 20 < DP(P(j)) < 500,

wherein the polymer mixture comprises a molecularly dispersed mixture containing P(i) and P(j) that forms a network under heterocrystallisation,

wherein P(i) or the sequences A of P(i) comprises a polyolefin selected from the group consisting of a polypropylene, polyethylene, VLDPE, LDPE, LLDPE, HDPE, HMWPE, UHMWPE and mixtures thereof,

wherein P(j) has a polydispersivity <30 and is selected from the group consisting of n-alkanes C_nH_{2n+2}; isoalkanes, cyclic alkanes C_nH_{2n}, polyethylene wax; paraffins and paraffin wax of mineral origin such as macrocrystalline, intermediate or microcrystalline paraffins, brittle, ductile, elastic or plastic microcrystalline paraffins; paraffins and paraffin wax of synthetic origin; hyper-branched alpha olefins; polypropylene wax and mixtures thereof; and

wherein P(i) has a degree of branching $<3 \times 10^{-2}$, and P(j) has a degree of branching $<5 \times 10^{-2}$, and wherein ~~0.1 x DP(P(j)) < DPs(P(i)) < 10 x DP(P(j))~~ the first polymer P(i) and the second polymer P(j) have been mixed together using a twin screw extruder.

Claim 14 (previously presented): The polymer mixture according to claim 13, wherein under comparable processing conditions of P(i) and of P(i) + P(j) the quotient of the yield stress sy(i, j) of P(i) + P(j) and the yield stress sy(i) of P(j), sy(i, j)/sy(i) is >1.1 and <3.0.

Claim 15 (previously presented): The polymer mixtures according to claim 14, wherein E(i,j) is >1.3, sy(i, j) is > 1.2 and eb (i,j) is > 1.03.

Claim 16 (previously presented): The polymer mixtures according to claim 14, wherein E(i,j) is >1.5, sy(i, j) is > 1.3 and eb (i,j) is > 1.05.

Claim 17 (previously presented): The polymer mixtures according to claim 14, wherein E(i,j) is >2.0, sy(i, j) is > 1.5 and eb (i,j) is > 1.10.

Claim 18 (previously presented): The polymer mixture according to claim 13, wherein a quotient of the MFI(i, j) of the mixture of P(i) + P(j) and the MFI(i) of P(i), MFI(i, j)/MFI(i) is >1.2 and <500.

Claim 19 (previously presented): The polymer mixture according to claim 18, wherein the quotient of MFI(i, j) and MFI(i) is >1.5.

Claim 20 (previously presented): The polymer mixture according to claim 18, wherein the quotient of MFI(i, j) and MFI(i) is >2.0.

Claim 21 (previously presented): The polymer mixture according to claim 18, wherein the quotient of MFI(i, j) and MFI(i) is >3.0.

Claim 22 (previously presented): The polymer mixture according to claim 13, wherein under comparable processing conditions of P(i) and of P(i) + P(j), the quotient of the crystallinity K(i, j) of P(i) + P(j) and the crystallinity K(i) of P(i), K(i, j)/K(i) is >1.03 and <3.

Claim 23 (previously presented): The polymer mixture according to claim 22, wherein the quotient of K(i, j) and K(i) is >1.05.

Claim 24 (previously presented): The polymer mixture according to claim 22, wherein the quotient of K(i, j) and K(i) is >1.1.

Claim 25 (previously presented): The polymer mixture according to claim 22, wherein the quotient of K(i, j) and K(i) is >1.2.

Claim 26 (previously presented): The polymer mixture according to claim 13, wherein the fraction A(j) of P(j) relative to P(i) + P(i) in wt.% is in the range $1 < A(j) < 90$.

Claim 27 (previously presented): The polymer mixture according to claim 13, wherein the fraction A(j) of P(j) relative to P(i) + P(i) in wt.% is in the range $2 < A(j) < 85$.

Claim 28(previously presented): The polymer mixture according to claim 13, wherein the fraction A(j) of P(j) relative to P(i) + P(i) in wt.% is in the range $3 < A(j) < 80$.

Claim 29 (previously presented): The polymer mixture according to claim 13, wherein the fraction A(j) of P(j) relative to P(i) + P(i) in wt.% is in the range $5 < A(j) < 75$.

Claim 30 (canceled):

Claim 31 (previously presented): The polymer mixture according to claim 13, wherein P(i) has a degree of branching $<1 \times 10^{-2}$, and P(j) has a degree of branching $<1 \times 10^{-3}$.

Claim 32 (previously presented): The polymer mixture according to claim 13, wherein P(i) has a degree of branching $<5 \times 10^{-3}$, and P(j) has a degree of branching $<1 \times 10^{-3}$.

Claim 33 (previously presented): The polymer mixture according to claim 13, wherein P(i) has a degree of branching $<1 \times 10^{-3}$, and P(j) has a degree of branching $<1 \times 10^{-4}$.

Claim 34 (canceled):

Claim 35 (previously presented): The polymer mixture according to claim 13, wherein P(j) has a polydispersivity <20.

Claim 36 (previously presented): The polymer mixture according to claim 13, wherein P(j) has a polydispersivity <10.

Claim 37 (previously presented): The polymer mixture according to claim 13, wherein P(j) has a polydispersivity <5.

Claim 38 (previously presented): The polymer mixture according to claim 13, wherein P(i) and/or P(j) have long-chain branchings which have a degree of polymerisation >20.

Claim 39 (previously presented): The polymer mixture according to claim 13, wherein P(i) and/or P(j) have long-chain branchings which have a degree of polymerisation >30.

Claim 40 (currently amended): The polymer mixture according to claim 13, wherein P(i) and/or P(j) have long-chain branchings which have a degree of polymerisation >40.

Claim 41 (previously presented): The polymer mixture according to claim 13, wherein P(i) and/or P(j) have long-chain branchings which have a degree of polymerisation >50.

Claims 42-43 (canceled):

Claim 44 (previously presented): The polymer mixture according to claim 13, wherein P(j) has a density in g/cm^3 of >0.9, and a melting or dropping point in °C of >80.

Claim 45 (previously presented): The polymer mixture according to claim 13, wherein P(j) has a density in g/cm^3 of >0.925, and a melting or dropping point in °C of >100.

Claim 46 (previously presented): The polymer mixture according to claim 13, wherein P(j) has a density in g/cm^3 of >0.950, and a melting or dropping point in °C of >110.

Claim 47 (previously presented): The polymer mixture according to claim 13, wherein P(j) has a density in g/cm^3 of >0.970, and a melting or dropping point in °C of >120.

Claim 48 (previously presented): The polymer mixture according to claim 13, wherein P(j) has a density in g/cm^3 of >0.980, and a melting or dropping point in °C of >125.

Claim 49 (previously presented): The polymer mixture according to claim 13, wherein the polymer mixture after preparation is present in the form selected from the group consisting of granules, pellets, powder, macro- or micro-fibres, films, casting, continuous, casting, extrudate, thermo-shaped part and combinations thereof.

Claim 50 (canceled):

Claim 51 (previously presented): The polymer mixture according to claim 14, wherein, if there is a fraction A(j) of P(j) relative to P(i) + P(i) in wt.% within the range $1 < A(j) < 15$, the quotient of the breaking elongation eb(i, j) of P(i) + P(j) and the breaking elongation eb(i) of P(i), eb(i, j)/eb(i) is >1.01 and <1.5.

Claim 52 (previously presented): The polymer mixture according to claim 13, wherein $0.5 \times DP(P(j)) < DPs(P(i)) < 5 \times DP(P(j))$.

Claim 53 (canceled):

Claim 54 (previously presented): The polymer mixture according to claim 13, wherein $0.3 \times DP(P(j)) < DPs(P(i)) < 7 \times DP(P(j))$.